

REMARKS

Reconsideration of this application is respectfully requested.

In the Official Action, the Examiner rejects claims 1 and 7-9 under 35 U.S.C. § 103(a) as being unpatentable over Kokai Publication No. 4-329944 (hereinafter “Kokai”) in view of U.S. Patent No. 4,943,290 to Rexroth, et al. (hereinafter “Rexroth”). Furthermore, the Examiner rejects claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Kokai and Rexroth and further in view of U.S. Patent No. 5,846,241 to Kittur, et al. (hereinafter “Kittur”).

In response, the Applicant respectfully traverses the Examiner’s rejections under 35 U.S.C. §§ 102(b) and 103(a) for at least the reasons set forth below. However, independent claim 1 has been amended to clarify its distinguishing features. Specifically, independent claim 1 has been amended to recite a radio knife comprising:

“an electrically insulative flexible sheath having a flow channel inside, a distal end portion and a proximal end portion, the distal end portion of the sheath having a distal opening and an axis;

a support member which closes the distal opening of the sheath, the support member having a slide hole with a diameter smaller than that of the distal opening extending along the axis thereof;

an operating wire axially movable in the sheath;

an electrode portion which has a distal end portion and a proximal end portion and of which at least a part forms a rod-shaped portion, the proximal end portion of the electrode portion being coupled to the operating wire, the rod-shaped portion being passed through the slide hole for axial projection and retraction;

a control section which is provided on the proximal end portion of the sheath and controls the operating wire to project and retract the electrode portion in the axial direction, the control section having a high-frequency current supply portion which supplies a high-frequency current to the electrode portion;

a liquid feed portion which is provided on the proximal end side of the sheath and feeds a liquid through the flow channel inside the sheath towards the distal opening; and

~~a plurality of openings for liquid feed which are formed in the support member, the plurality of openings for liquid feed being arranged around and independently of the slide hole, communicating to the only one flow channel, and partially blocking flow of the liquid fed in the vicinity of the distal end portion by the liquid feed portion such that a cross sectional area of the plurality of openings for liquid feed is smaller than a cross sectional area of the only one flow channel~~ a plurality of straight openings extending outward from the slide hole, an inner end portion of each of the straight openings being coupled to the slide hole.”

The amendment to claim 1 is fully supported in the original disclosure. Thus, no new matter has been introduced into the disclosure by way of the present amendment to independent claim 1.

Applicants respectfully submit that none of the prior art references, alone or in any proper combination teach or suggest the features now recited in independent claim 1.

In the claimed invention, each of the plurality of straight openings is effective to prevent the electrode portion from penetrating the straight opening. In contrast, the electrode does not penetrate in the Rexroth reference. If the support walls (100-102) are worn due to insertion and extraction of the electrode rod, etc. Thus, the electrode may become detached from the support walls and displaced about the center.

With regard to the rejections of claims 1 and 7-9 under 35 U.S.C. § 103(a), independent claim 1, as amended, is not rendered obvious by the cited references because neither the Kokai application nor the Rexroth patent, whether taken alone or in combination, teach or suggest a radio knife having the features recited in independent claim 1. Accordingly, claim 1, as amended, patentably distinguishes over the prior art and is allowable. Claims 7-9, being dependent upon claim 1, are thus at least allowable therewith. Consequently, the Examiner is respectfully requested to withdraw the rejections of claims 1 and 7-9 under 35 U.S.C. § 103(a).

With regard to the rejection of claim 10 under 35 U.S.C. § 103(a), since independent claim 1 patentably distinguishes over the prior art and is allowable, claim 10 is at least allowable therewith because it depends from an allowable base claim. Consequently, the Examiner is respectfully requested to withdraw the rejection of claim 10 under 35 U.S.C. § 103(a).

Furthermore, new claims 14-18 have been added to further define the patentable invention. New claims 14-18 are fully supported in the original disclosure, such as at Figures 7A-8B of the Drawings. Thus, no new matter has been entered into the disclosure by way of the addition of new claims 14-18. Applicants respectfully submit that new claims 14-18 are at least allowable as depending upon an allowable base claim.

In view of the above, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,

/Thomas Spinelli/

Thomas Spinelli

Registration No.: 39,533

Scully, Scott, Murphy & Presser, P.C.
400 Garden City Plaza, Suite 300
Garden City, New York 11530
(516) 742-4343
TS:cm